MEET DALE MANQUEN

My first job after college was with 3M Company designing professional audio tape recorders.&#65533; During my 4-year stay I rose from being wet behind the ears to being offered the position of Lab Manager for our development lab.&#65533; I was responsible for the creation of the 3M Model 56 16-track tape recorder, a machine that changed the paradigm of multitrack recorder architecture.&#65533; This was the first multitrack recorder that was not just a collection of many single-channel electronics modules.&#65533; I incorporated 64 circuit boards into a single chassis and controlled everything from a single remote control module.&#65533; This basic architecture was eventually adopted by virtually every other manufacturer.

I left 3M to attend graduate school, with the intent of getting a PhD in Electrical Engineering.&#65533; Unfortunately for me, New Mexico State University had a new batch of young professors who were not able to offer a solid curriculum in my areas of interest.&#65533; I decided to change my plans and shortened my stay to only 2 years.&#65533; During that time I completed my MSEE and also took all but one of the courses required for me to earn an MSME specializing in Industrial Engineering.

Upon graduation I joined Ampex Corporation in a new position that was created for me - Product Programming Manager.&#65533; My assignment was to create new professional audio recording products.&#65533; I was to start with a need in the marketplace, formulate a product description, get Engineering to design the product, introduce the product to the factory, and then launch the product into the marketplace.&#65533; Once the product was established, my job was complete and I was already involved with the next new product.&#65533; Using this mode of operation, I was instrumental in the final design and introduction of the Ampex MM-1100 (which was almost the same as my 3M Model 56, but 3 years later), created the AG-440C as a stopgap product to buy us time in the marketplace and started the 4-year program that became the ATR-100.

I left Ampex Redwood City to join the Tape Division after 2 years.&#65533; (Due to huge financial losses at Ampex caused by management and accounting underhandedness, the company went through an incredible upheaval that gave me 4 different bosses in only 2 years.)&#65533; I moved back to Los Angeles as a tape salesman.&#65533; Fortunately for me, Ampex Tape had a good new product, Ampex 406, with which I captured many 3M Scotch 206 studio accounts.&#65533; Thanks to being in the right place at the right time, I opened up the entire Hollywood market to Ampex within 6 months.&#65533; Unfortunately, a unilateral change in the Ampex sales commission program forced me to terminate my career with Ampex Tape.

After a short stint as Technical Coordinator of the Post Production Sound Department at the Warner Bros./Columbia Burbank Studios, I began teaching at Cal State Northridge.&#65533; I started a program in Audio Design Engineering and built an Audio Lab for the program.

After several years of making less money than my graduating seniors, I was lured away by Burroughs Corporation to work on the design of optical disk recorders.&#65533; I helped recruit a team of young engineers to develop optical recorders for mainframe computer applications.

At one of the local AES section meetings WED engineering (Disney) asked me to consult for them regarding new tape reproducers for EPCOT Center.&#65533; I conducted a study to determine the type of multitrack reproducers they should be using.&#65533; Unfortunately, none of their usual vendors wanted to build the 24-track bin reproducer for 2" tape that I recommended.&#65533; I was able to demonstrate enough of a breadboard to convince them to continue with the project.&#65533; I teamed up with Jack Williams of Pacific Research and Engineering to take on the $2 million project.&#65533; I designed the product in my garage and Jack built 53 $40,000 units in San Diego.&#65533; Several of the bin's features are covered by my first patent.

After the EPCOT project I consulted for several customers and manufactured a high-performance flutter meter for tape recorder testing.&#65533; I became one of the world's experts in the design and analysis of audio tape recorder transports, using exotic FFT techniques to analyze the performance of each component in the tape path.&#65533;

My company, Altair Electronics, fell victim to a property settlement after my divorce.&#65533; I had been doing a lot of consulting for Joe Martinson, so I became a full-time employee of Martinsound.&#65533;

I was responsible for several aspects of the Flying Faders^{TM} hardware, including circuits, mechanical components and packaging of the motorized fader and servo system, and the power supply system.&#65533; Joe Martinson and I jointly hold the 3 Flying Faders patents.&#65533; I also set up and ran the manufacturing facility for Flying Faders.&#65533; We ramped up from delivering 2 Beta test systems in December 1988 to shipping the first Neve version of Flying Faders in March 1989 to completing 80 systems by the end of 1989.&#65533; All this with an in-house production staff of 5 people.&#65533; Zero to $8 Million within one year!&#65533; After a few years as Production Manager, I became the product manager of Flying Faders.&#65533; I also assisted with the development of some of Martinsound's new products.

I am currently involved in creating a program at Cal State Northridge to train recording studio technicians (not recording engineers.)&#65533; I believe this to be the only such program in the world.&#65533; We completed the first pass through the 10-month program in November and graduated 11 students.

And that is my career in a big nutshell.&#65533; I would rate myself as a very good innovator and electromechanical designer.&#65533; I have the skills and ability to blend electrical and mechanical components into highly optimized solutions.&#65533; Certainly this is why I found tape recorders and fader automation systems so challenging and rewarding.&#65533; I also have demonstrated the ability to break out of the box to explore new solutions to old problems, and to provide the leadership necessary to implement these new solutions.

My hobbies include amateur (ham) radio (KO6VO), bowling, camping, biking, and genealogy.&#65533; By far my biggest passion is Lionel trains, including a 500 square foot layout in my attic.

Caption: Dale Manquen - September 2001